

PF-0590 USN

<110> INCYTE GENOMICS, INC.; YUE, Henry  
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GUEGLER, Karl J.; BAUGHN, Mariah R.  
LU, Dyung Aina M.; TANG, Y. Tom

<120> MEMBRANE-ASSOCIATED ORGANIZATIONAL PROTEINS

<130> PF-0590 USN

<140> 09/787,677

<141> To Be Assigned

<150> PCT/US99/22082

<151> 1999-09-23

<150> US 60/172,228

<151> 1999-05-04

<150> US 60/155,251

<151> 1998-10-13

<150> US 60/155,215

<151> 1998-09-25

<160> 12

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<212> PRT

<213> Homo sapiens

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Lys	Phe	Gly	Gln	Trp	Ala	Asp	Ser	Arg	Ala	Asn	Thr	Val	Tyr	Gly
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Leu	Gly	Phe	Ala	Ser	Glu	Gln	His	Leu	Thr	Gln	Phe	Ala	Glu	Lys
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Phe	Gln	Glu	Val	Lys	Glu	Ala	Ala	Arg	Leu	Ala	Arg	Glu	Lys	Ser
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Gln	Asp	Gly	Gly	Glu	Leu	Thr	Ser	Pro	Ala	Leu	Gly	Leu	Ala	Ser
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His	Gln	Val	Pro	Pro	Ser	Pro	Leu	Val	Ser	Ala	Asn	Gly	Pro	Gly
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Gly Glu Val Gln Trp Glu Ala Glu Phe	Phe Ala Leu Gln Asp Ser				
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Asn Asn Lys Leu Ala Gly Ala Leu Arg	Glu Ala Asn Ala Ala Ala				
	200		205		210
Ala Gln Trp Arg Gln Gln Leu Glu Ala	Gln Arg Ala Glu Ala Glu				
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Arg Leu Arg Gln Arg Val Ala Glu Leu	Glu Ala Gln Ala Ala Ser				
	230		235		240
Glu Val Thr Pro Thr Gly Glu Lys Glu	Gly Leu Gly Gln Gly Gln				
	245		250		255
Ser Leu Glu Gln Leu Glu Ala Leu Val	Gln Thr Lys Asp Gln Glu				
	260		265		270
Ile Gln Thr Leu Lys Ser Gln Thr Gly	Gly Pro Arg Glu Ala Leu				
	275		280		285
Glu Ala Ala Glu Arg Glu Glu Thr Gln	Gln Lys Val Gln Asp Leu				
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Glu Thr Arg Asn Ala Glu Leu Glu His	Gln Leu Arg Ala Met Glu				
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Arg Ser Leu Glu Glu Ala Arg Ala Glu	Arg Glu Arg Ala Arg Ala				
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Glu Val Gly Arg Ala Ala Gln Leu Leu	Asp Val Arg Leu Phe Glu				
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<220>  
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Gly Glu Gly Ser Leu Gly Cys Gly Ile	Gly Tyr Gly Tyr Leu His				
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Arg Ile Pro Thr Gln Pro Pro Ser Tyr	His Lys Lys Pro Pro Gly				
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Thr Pro Pro Pro Ser Ala Leu Pro Leu	Gly Ala Pro Pro Pro Asp				
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Ala Leu Pro Pro Gly Pro Thr Pro Glu	Asp Ser Pro Ser Leu Glu				
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Thr Gly Ser Arg Gln Ser Asp Tyr Met	Glu Ala Leu Leu Gln Ala				
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Pro Gly Ser Ser Met Glu Asp Pro Leu	Pro Gly Pro Gly Ser Pro				
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Ser His Ser Ala Pro Asp Pro Asp Gly	Leu Pro His Phe Met Glu				

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Thr Pro Leu Gln	Pro Pro Pro Pro Val	Gln Arg Val Met Asp	Pro		
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Gly Phe Leu Asp	Val Ser Gly Ile Ser	Leu Leu Asp Asn Ser	Asn		
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Ala Ser Val Trp	Pro Ser Leu Pro Ser	Ser Thr Glu Leu Thr	Thr		
	185		190		195
Thr Ala Val Ser	Thr Ser Gly Pro Glu	Asp Ile Cys Ser Ser	Ser		
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Ser Ser His Glu	Arg Gly Gly Glu Ala	Thr Trp Ser Gly Ser	Glu		
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Phe Glu Val Ser	Phe Leu Asp Ser Pro	Gly Ala Gln Ala Gln	Ala		
	230		235		240
Asp His Leu Pro	Gln Leu Thr Leu Pro	Asp Ser Leu Thr Ser	Ala		
	245		250		255
Ala Ser Pro Glu	Asp Gly Leu Ser Ala	Glu Leu Leu Glu Ala	Gln		
	260		265		270
Ala Glu Glu Glu	Pro Ala Ser Thr Glu	Gly Leu Asp Thr Gly	Thr		
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&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

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&lt;223&gt; Incyte ID No: 2594049CD1

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Lys Thr Ser Ser Tyr	Val Gly Ala Ser	Ile Val Thr Ala Val	Gly
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Phe Ser Lys Gly Leu	Trp Met Glu Cys	Ala Thr His Ser Thr	Gly
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Ile Thr Gln Cys Asp	Ile Tyr Ser Thr	Leu Leu Gly Leu Pro	Ala
	65	70	75
Asp Ile Gln Ala Ala	Gln Ala Met Met	Val Thr Ser Ser Ala	Ile
	80	85	90
Ser Ser Leu Ala Cys	Ile Ile Ser Val	Val Gly Met Arg Cys	Thr
	95	100	105
Val Phe Cys Gln Glu	Ser Arg Ala Lys	Asp Arg Val Ala Val	Ala
	110	115	120
Gly Gly Val Phe Phe	Ile Leu Gly Gly	Leu Leu Gly Phe Ile	Pro
	125	130	135
Val Ala Trp Asn Leu	His Gly Ile Leu	Arg Asp Phe Tyr Ser	Pro
	140	145	150
Leu Val Pro Asp Ser	Met Lys Phe Glu	Ile Gly Glu Ala Leu	Tyr
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Leu Gly Ile Ile Ser	Ser Ser Leu Phe	Ser Leu Ile Ala Gly	Ile
	170	175	180
Leu Cys Phe Ser Cys	Ser Ser Gln Arg	Asn Arg Ser Asn Tyr	Tyr
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Pro	Gly	Gln	Pro	Pro	Lys	Val	Lys	Ser	Glu	Phe	Asn	Ser	Tyr	Ser
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<211> 292

<212> PRT

<213> Homo sapiens

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<221> misc\_feature

<223> Incyte ID No: 5139028CD1

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Pro	Val	Gln	Ala	Thr	Ala	Ile	Ser	Pro	Pro	Pro	Val	Leu	Tyr	Pro
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Gln	Glu	Val	Gln	Glu	Ser	Leu	Leu	Gln	Ile	Pro	Glu	Gly	Asp	Ser
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Thr	Ala	Val	Ser	Gly	Pro	Gly	Pro	Gly	Gln	Met	Val	Ala	Pro	Val
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Val	Arg	Glu	Ile	His	Leu	Cys	Lys	Asp	Glu	Arg	Gly	Lys	Thr	Gly
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Gln	Ala	Asn	Thr	Pro	Ala	Ser	Leu	Val	Gly	Leu	Arg	Phe	Gly	Asp
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Gln	Leu	Leu	Gln	Ile	Asp	Gly	Arg	Asp	Cys	Ala	Gly	Trp	Ser	Ser
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His	Lys	Ala	His	Gln	Val	Val	Lys	Lys	Ala	Ser	Gly	Asp	Lys	Ile
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His	Lys	Asp	Ser	Met	Gly	His	Val	Gly	Phe	Val	Ile	Lys	Lys	Gly
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Lys	Ile	Val	Ser	Leu	Val	Lys	Gly	Ser	Ser	Ala	Ala	Cys	Asn	Gly
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Leu	Leu	Thr	Asn	His	Tyr	Val	Cys	Glu	Val	Asp	Gly	Gln	Asn	Val
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Ile	Gly	Leu	Lys	Asp	Lys	Lys	Ile	Met	Glu	Ile	Leu	Ala	Thr	Ala
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Gly	Asn	Val	Val	Thr	Leu	Thr	Ile	Ile	Pro	Ser	Val	Ile	Tyr	Glu
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His	Met	Val	Lys	Lys	Leu	Pro	Pro	Val	Leu	Leu	His	His	Thr	Met
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caatgtccac agccaggag cagccaatct tcagcacacg ggcgacgtg ttccaaattg 240  
acccagccac caagcgaaac tggatcccag cgggcaagca cgcactcact gtctcctatt 300  
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<213> Homo sapiens

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<213> Homo sapiens

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<211> 1473

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Incyte ID No: 5139028CB1

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<210> 9

<211> 189

<212> PRT

<213> Rattus norvegicus

<220>

<221> misc\_feature

<223> GenBank ID No: g1913909

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Ser Lys His Ala Val Thr Val Ser Tyr Phe Tyr Asp Ser Thr Arg
      35                      40                      45
Asn Val Tyr Arg Ile Ile Ser Leu Asp Gly Ser Lys Ala Ile Ile
      50                      55                      60
Asn Ser Thr Ile Thr Pro Asn Met Thr Phe Thr Lys Thr Ser Gln
      65                      70                      75
Lys Phe Gly Gln Trp Ala Asp Ser Arg Ala Asn Thr Val Tyr Gly
      80                      85                      90
Leu Gly Phe Ser Ser Glu His His Leu Ser Lys Phe Ala Glu Lys
      95                      100                     105
Phe Gln Glu Phe Lys Glu Ala Ala Arg Leu Ala Lys Glu Lys Ser
     110                      115                     120
Gln Glu Lys Met Glu Leu Thr Ser Thr Pro Ser Gln Glu Ser Ala
     125                      130                     135
Gly Gly Asp Leu Gln Ser Pro Leu Thr Pro Glu Ser Ile Asn Gly
     140                      145                     150
Thr Asp Asp Glu Arg Thr Pro Asp Val Thr Gln Asn Ser Glu Pro
     155                      160                     165
Arg Ala Glu Pro Ala Gln Asn Ala Leu Pro Phe Ser His Arg Tyr
     170                      175                     180
Thr Phe Asn Ser Ala Ile Met Ile Lys
     185

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&lt;210&gt; 10

&lt;211&gt; 451

&lt;212&gt; PRT

&lt;213&gt; Rattus norvegicus

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; GenBank ID No: g4432587

&lt;400&gt; 10

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Met Gly Leu Gly Ala Ser Ser Glu Gln Pro Ala Gly Gly Glu Gly
  1                      5                      10                      15
Phe His Leu His Gly Val Gln Glu Asn Ser Pro Ala Gln Gln Ala
      20                      25                      30
Gly Leu Glu Pro Tyr Phe Asp Phe Ile Ile Thr Ile Gly His Ser
      35                      40                      45
Arg Leu Asn Lys Glu Asn Asp Thr Leu Lys Ala Leu Leu Lys Ala
      50                      55                      60
Asn Val Glu Lys Pro Val Lys Leu Glu Val Phe Asn Met Lys Thr
      65                      70                      75
Met Arg Val Arg Glu Val Glu Val Val Pro Ser Asn Met Trp Gly
      80                      85                      90
Gly Gln Gly Leu Leu Gly Ala Ser Val Arg Phe Cys Ser Phe Arg
      95                      100                     105
Arg Ala Ser Glu His Val Trp His Val Leu Asp Val Glu Pro Ser
     110                      115                     120
Ser Pro Ala Ala Leu Ala Gly Leu Arg Pro Tyr Thr Asp Tyr Ile
     125                      130                     135
Val Gly Ser Asp Gln Ile Leu Gln Glu Ser Glu Asp Phe Phe Thr
     140                      145                     150
Leu Ile Glu Ser His Glu Gly Lys Pro Leu Lys Leu Met Val Tyr
     155                      160                     165

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Asn	Ser	Glu	Ser	Asp	Ser	Cys	Arg	Glu	Val	Thr	Val	Thr	Pro	Asn	
				170					175					180	
Ala	Ala	Trp	Gly	Gly	Glu	Gly	Ser	Leu	Gly	Cys	Gly	Ile	Gly	Tyr	
				185					190					195	
Gly	Tyr	Leu	His	Arg	Ile	Pro	Thr	Gln	Pro	Ser	Ser	Gln	Tyr	Lys	
				200					205					210	
Lys	Pro	Pro	Ser	Ala	Ser	Ser	Pro	Gly	Thr	Pro	Ala	Lys	Thr	Pro	
				215					220					225	
Gln	Pro	Asn	Ala	Phe	Pro	Leu	Gly	Ala	Pro	Pro	Pro	Trp	Pro	Ile	
				230					235					240	
Pro	Gln	Asp	Ser	Ser	Gly	Pro	Glu	Leu	Gly	Ser	Arg	Gln	Ser	Asp	
				245					250					255	
Tyr	Met	Glu	Ala	Leu	Pro	Gln	Val	Pro	Gly	Gly	Phe	Met	Glu	Glu	
				260					265					270	
Gln	Leu	Pro	Gly	Pro	Gly	Ser	Pro	Gly	His	Gly	Thr	Ala	Asp	Tyr	
				275					280					285	
Gly	Gly	Cys	Leu	His	Ser	Met	Glu	Ile	Pro	Leu	Gln	Pro	Pro	Pro	
				290					295					300	
Pro	Val	Gln	Arg	Val	Met	Asp	Pro	Gly	Phe	Leu	Asp	Val	Ser	Gly	
				305					310					315	
Met	Ser	Leu	Leu	Asp	Ser	Asn	Asn	Thr	Ser	Val	Cys	Pro	Ser	Leu	
				320					325					330	
Ser	Ser	Ser	Ser	Leu	Leu	Thr	Pro	Thr	Ala	Val	Ser	Ala	Leu	Gly	
				335					340					345	
Pro	Glu	Asp	Ile	Gly	Ser	Ser	Ser	Ser	Ser	His	Glu	Arg	Gly	Gly	
				350					355					360	
Glu	Ala	Thr	Trp	Ser	Gly	Ser	Glu	Phe	Glu	Ile	Ser	Phe	Pro	Asp	
				365					370					375	
Ser	Pro	Gly	Ser	Gln	Ala	Gln	Val	Asp	His	Leu	Pro	Arg	Leu	Thr	
				380					385					390	
Leu	Pro	Asp	Gly	Leu	Thr	Ser	Ala	Ala	Ser	Pro	Glu	Glu	Gly	Leu	
				395					400					405	
Ser	Ala	Glu	Leu	Leu	Glu	Ala	Gln	Thr	Glu	Glu	Pro	Ala	His	Thr	
				410					415					420	
Ala	Ser	Leu	Asp	Cys	Met	Ala	Gln	Thr	Glu	Gly	Pro	Ala	Gly	Gln	
				425					430					435	
Val	Gln	Ala	Ala	Pro	Asp	Pro	Glu	Pro	Gly	Leu	Cys	Glu	Gly	Pro	
				440					445					450	

Trp

<210> 11

<211> 230

<212> PRT

<213> Mus musculus

<220>

<221> misc\_feature

<223> GenBank ID No: g3335184

<400> 11

Met	Ala	Ser	Leu	Gly	Val	Gln	Leu	Val	Gly	Tyr	Ile	Leu	Gly	Leu	
1				5					10					15	
Leu	Gly	Leu	Leu	Gly	Thr	Ser	Ile	Ala	Met	Leu	Leu	Pro	Asn	Trp	
				20					25					30	
Arg	Thr	Ser	Ser	Tyr	Val	Gly	Ala	Ser	Ile	Val	Thr	Ala	Val	Gly	
				35					40					45	
Phe	Ser	Lys	Gly	Leu	Trp	Met	Glu	Cys	Ala	Thr	His	Ser	Thr	Gly	
				50					55					60	

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Ile	Thr	Gln	Cys	Asp	Ile	Tyr	Ser	Thr	Leu	Leu	Gly	Leu	Pro	Ala	
				65					70						75
Asp	Ile	Gln	Ala	Ala	Gln	Ala	Met	Met	Val	Thr	Ser	Ser	Ala	Met	
				80					85						90
Ser	Ser	Leu	Ala	Cys	Ile	Ile	Ser	Val	Val	Gly	Met	Arg	Cys	Thr	
				95					100						105
Val	Phe	Cys	Gln	Asp	Ser	Arg	Ala	Lys	Asp	Arg	Val	Ala	Val	Val	
				110					115						120
Gly	Gly	Val	Phe	Phe	Ile	Leu	Gly	Gly	Ile	Leu	Gly	Phe	Ile	Pro	
				125					130						135
Val	Ala	Trp	Asn	Leu	His	Gly	Ile	Leu	Arg	Asp	Phe	Tyr	Ser	Pro	
				140					145						150
Leu	Val	Pro	Asp	Ser	Met	Lys	Phe	Glu	Ile	Gly	Glu	Ala	Leu	Tyr	
				155					160						165
Leu	Gly	Ile	Ile	Ser	Ala	Leu	Phe	Ser	Leu	Val	Ala	Gly	Val	Ile	
				170					175						180
Leu	Cys	Phe	Ser	Cys	Ser	Pro	Gln	Gly	Asn	Arg	Thr	Asn	Tyr	Tyr	
				185					190						195
Asp	Gly	Tyr	Gln	Ala	Gln	Pro	Leu	Ala	Thr	Arg	Ser	Ser	Pro	Arg	
				200					205						210
Ser	Ala	Gln	Gln	Pro	Lys	Ala	Lys	Ser	Glu	Phe	Asn	Ser	Tyr	Ser	
				215					220						225
Leu	Thr	Gly	Tyr	Val											
				230											

<210> 12

<211> 298

<212> PRT

<213> Mus musculus

<220>

<221> misc\_feature

<223> GenBank ID No: g3342560

<400> 12

Met	Ser	Leu	Tyr	Pro	Ser	Leu	Glu	Asp	Leu	Lys	Val	Asp	Lys	Val	
1				5					10					15	
Ile	Gln	Ala	Gln	Thr	Ala	Tyr	Ser	Ala	Asn	Pro	Ala	Ser	Gln	Ala	
				20					25					30	
Phe	Val	Leu	Val	Asp	Ala	Ser	Ala	Ala	Leu	Pro	Pro	Asp	Gly	Asn	
				35					40					45	
Leu	Tyr	Pro	Lys	Leu	Tyr	Pro	Glu	Leu	Ser	Gln	Tyr	Met	Gly	Leu	
				50					55					60	
Ser	Leu	Asn	Glu	Ala	Glu	Ile	Cys	Glu	Ser	Met	Pro	Met	Val	Ser	
				65					70					75	
Gly	Ala	Pro	Ala	Gln	Gly	Leu	Val	Ala	Arg	Pro	Ser	Ser	Val	Asn	
				80					85					90	
Tyr	Met	Val	Ala	Pro	Val	Thr	Gly	Asn	Asp	Ala	Gly	Ile	Arg	Arg	
				95					100					105	
Ala	Glu	Ile	Lys	Gln	Gly	Ile	Arg	Glu	Val	Ile	Leu	Cys	Lys	Asp	
				110					115					120	
Gln	Asp	Gly	Lys	Ile	Gly	Leu	Arg	Leu	Lys	Ser	Ile	Asp	Asn	Gly	
				125					130					135	
Ile	Phe	Val	Gln	Leu	Val	Gln	Ala	Asn	Ser	Pro	Ala	Ser	Leu	Val	
				140					145					150	
Gly	Leu	Arg	Phe	Gly	Asp	Gln	Val	Leu	Gln	Ile	Asn	Gly	Glu	Asn	
				155					160					165	

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Cys	Ala	Gly	Trp	Ser	Ser	Asp	Lys	Ala	His	Lys	Val	Leu	Lys	Gln	
				170					175					180	
Ala	Phe	Gly	Glu	Lys	Ile	Thr	Met	Thr	Ile	Arg	Asp	Arg	Pro	Phe	
				185					190					195	
Glu	Arg	Thr	Val	Ile	Met	His	Lys	Asp	Ser	Ser	Gly	His	Val	Gly	
				200					205					210	
Phe	Ile	Phe	Lys	Ser	Gly	Lys	Ile	Thr	Ser	Ile	Val	Lys	Asp	Ser	
				215					220					225	
Ser	Ala	Ala	Arg	Asn	Gly	Leu	Leu	Thr	Asp	His	His	Ile	Cys	Glu	
				230					235					240	
Ile	Asn	Gly	Gln	Asn	Val	Ile	Gly	Leu	Lys	Asp	Ala	Gln	Ile	Ala	
				245					250					255	
Asp	Ile	Leu	Ser	Thr	Ala	Gly	Thr	Val	Val	Thr	Ile	Thr	Ile	Met	
				260					265					270	
Pro	Thr	Phe	Ile	Phe	Glu	His	Ile	Ile	Lys	Arg	Met	Ala	Pro	Ser	
				275					280					285	
Ile	Met	Lys	Ser	Leu	Met	Asp	His	Thr	Ile	Pro	Glu	Val			
				290					295						